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Remarks

Reconsideration of remaining claims 11, 12, 18 and 19 is respectfully requested.

In the Office action dated April 6, 2004 (application Paper No. 20040326), the Examiner rejected the pending claims under 35 USC §§ 112, second paragraph, 102(e) and 103(a). The Examiner's rejections will be discussed below in the order appearing in the Office action.

35 USC § 112, second paragraph Rejection - Claims 11, 12

The Examiner first rejected claims 11 and 12 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. In particular, the Examiner cited the misuse of the phrase "to make the transition regions on said first side non-parallel to the opposing first side". In response, applicant has amended claim 11 to now properly read: "to make the transition regions on said first side non-parallel to the opposing second side", where the proper antecedent basis for the term "second" can be found at line 4 of claim 11. With this amendment, applicant believes that claims 11 and 12 are now in compliance with the requirements of 35 USC 112, second paragraph and respectfully requests the Examiner to reconsider this rejection and find claims 11 and 12 allowable.

35 USC § 102(e) Rejection - Claims 11, 12

Claims 11 and 12 were next rejected by the Examiner under 35 USC 102(e) as being anticipated by US Patent 5,784,507 (Holm-Kennedy et al.), where the Examiner cited Holm-Kennedy et al. as teaching "using etching to fabricate a stepped etalon in which the transition regions between steps is not parallel to the opposing side".

In response, applicant asserts that Holm-Kennedy et al. does not disclose or suggest an etalon structure that comprises "a plurality of steps" as required by rejected independent claim 11. Moreover, claim 11 has been amended to further define the step of "processing" the abrupt transition to provide a region that "reduce[s] diffraction of light in each transition region and reduce[s] the dead spot behind each transition region". It is asserted that without the teaching of a "plurality of steps" there is no realization in

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Holm-Kennedy et al. regarding the presence of diffracted light beams at each abrupt transition between adjacent steps. The present invention addresses the problems related to the abrupt transition by using "further processing" of the "sidewalls" of the steps. Without this teaching, applicant asserts that Holm-Kennedy et al. cannot be found to anticipate the subject matter of the present invention as defined by claims 11 and 12.

Applicant therefore respectfully requests the Examiner to reconsider this rejection and find claims 11 and 12, as now amended, to be allowable over Holm-Kennedy et al.

35 USC § 103(a) Rejection - Claims 6, 11, 12 and 18

The Examiner next rejected claims 6, 11, 12 and 18 under 35 USC 103(a) as being unpatentable over US Patent 6,015,976 (Hatakeyama et al.) in view of US Patent 5,293,548 issued to Siebert. The Examiner cited Hatakeyama et al. as teaching a method of making optical filters using an angled beam through a mask and Siebert is cited as teaching "a stepped etalon wherein the transition region between steps is not parallel to the opposing surface".

In response, applicant believes that the Siebert reference is indeed limited to teaching the use of parallel surfaces on the steps. The diagram of FIG. 6b illustrates a "stepwise linear" approximation to a desired curve, however, the faces themselves remain "parallel" - the number of steps may be increased, by the teaching of Siebert, to better approximate a curve.

In contrast, the method of the present invention is particularly directed to "further processing" the stepped etalon structure such that "each transition region on said first side is non-perpendicular to the opposing second side to reduce diffraction of light in each transition region and reduce the dead spot behind each transition region."

Thus, applicant asserts that the combination of Hatakeyama et al. and Siebert cannot be found to render obvious the subject matter of the present invention. Applicant thus respectfully requests the Examiner to reconsider this rejection and find claims 11, 12 and 19 to be allowable, where claim 6 has been cancelled and re-written as "new" claim 19, depending from amended claim 11.

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35 USC § 103(a) Rejection - Claims 6, 1, 12 and 18

Lastly, the Examiner rejected the pending claims under 35 USC 103(a) as being unpatentable over the combination of Holm-Kennedy et al. (as applied to claim 11), when considered with Hatakeyama et al.

In response, applicant again asserts that Holm-Kennedy et al. does not disclose *per se* a "stepped etalon", nor recognize the diffractive problem of "dead spots" associated with the abrupt transitions between adjacent steps. Indeed, independent claim 11 has been amended to further define this aspect of the present invention. Hatakeyama et al., for the reasons discussed above, also lacks this teaching.

Applicant thus respectfully requests the Examiner to review amended independent claim 11 and find the subject matter of claim 11, as well as claims 12, 18 and 19 to now be allowable over the cited combination of Holm-Kennedy et al. and Hatakeyama et al.

Applicant believes that the case, in its present form, is now in condition for allowance and respectfully requests an early and favorable response from the Examiner in that regard. If for some reason or other the Examiner does not believe that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicant's attorney at the telephone number listed below.

Respectfully submitted,

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